

Materials List for:

# Monitoring Bacterial Colonization and Maintenance on *Arabidopsis thaliana* Roots in a Floating Hydroponic System

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## Materials

Name	Company	Catalog Number	Comments
<b>Required Materials</b>			
1.5 mL eppendorf tubes	any	N/A	
24-well plates	BD Falcon	1801343	
Aeraseal	Excel Scientific	BE255A2	
Autoclave	any	N/A	
Bacteria of Interest	any	N/A	Stored at -80°C in 40% glycerol preferred
BactoAgar	BD	2306428; REF 214010	
bleach	any	N/A	
Conviron	any	N/A	Short Day Light-Dark Cycles: 460-600 $\mu\text{moles}/\text{m}^2/\text{s}$ set at 9/15 hours light/dark at 18/21°C, with inner power outlet
Dessicator Jar: glass or heavy plastic	any	N/A	
Ethanol	any	N/A	
Flame	any	N/A	
Forceps	any	N/A	
Incubator	any	N/A	At optimal temperature for growth of specified bacteria
Hydrochloric Acid	any	N/A	
Lennox LB Broth	RPI	L24066-1000.0	
Microcentrifuge	any	N/A	
Micropipettors	any	N/A	Volumes 5 $\mu\text{L}$ to 1000 $\mu\text{L}$
Microscope (preferably fluorescence)	any	N/A	Could be light if best definition not important
MS Salts + MES	RPI	M70300-50.0	
Orbital Plate Shaker	any	N/A	Capable of running at 220 rpm for at least 96 hours
Petri Dishes	any	N/A	50 mL total volume
Reservoirs	any	N/A	
Spectrophotometer	any	N/A	
Standard Hole Punch	any	N/A	Approximately 7mm punch diameter
Sterile water	any	N/A	
Surgical Tape	3M	MMM1538-1	

Teflon Mesh	McMaster-Carr	1100t41	
Ultrasonicator	any	N/A	
Vortex Mixer	any	N/A	
X-gal	GoldBio	x4281c	other vendors available
<b>Suggested Materials</b>			
24 Prong Ultrasonicator attachment	any	N/A	For sonicating multiple samples at once. Can be done individually
Alumaseal II	Excel Scientific	FE124F	
Glass beads	any	N/A	
Multipetter/Repetter	any	N/A	
Sterile 96-well plates	any	N/A	For serial dilutions. Can be replaced by eppendorf tubes
<b>Biological Materials Used</b>			
<i>Arabidopsis thaliana</i> seeds	any	N/A	We recommend Arabidopsis Biological Resource Center for seed stocks
<i>Arthrobacter nicotinovorans</i>			Levy, <i>et al.</i> 2018
<i>Curtobacterium oceanosedimentum</i>			Levy, <i>et al.</i> 2018
<i>Microbacterium oleivorans</i>			Levy, <i>et al.</i> 2018
<i>Pseudomonas simiae</i> WCS417r			Published in a similar system in Haney, <i>et al.</i> 2015. Strain used developed in Cole, <i>et al.</i> 2017